DOCUMENT RESUME

ED 187 044 EC 124 309

AUTHOR Freeman, Robert N.
TITLE Life in Classrooms: Teacher Interaction with Successful and Unsuccessful Pupils.
PUB DATE Apr 80
NOTE 16p.; Paper presented at the Annual International Convention of The Council for Exceptional Children (58th, Philadelphia, PA, April, 1980, Session B-7).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Classroom Environment; Distance; Elementary Education; Exceptional Child Research; *Interaction; *Mainstreaming; *Mild Disabilities; Positive Reinforcement; Student Teacher Relationship; *Success; *Teacher Attitudes; *Verbal Communication

ABSTRACT

Teacher attitude toward the integration of mildy handicapped students in regular classrooms was studied with 32 successful and 32 unsuccessful students (in grades 3 through 6). Verbal interactions and physical distance were recorded and examined to determine the relationship between students and teachers. Findings indicated that teachers interact significantly differently with successful and unsuccessful pupils. Successful pupils received almost twice as much interaction in a much more positive vein than did unsuccessful pupils. There was a statistically significant difference in the physical distance between teachers and the two groups studied. (Author/PHR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED187044

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Freeman
59
4/30

Life in Classrooms: Teacher Interaction With Successful and Unsuccessful Pupils

A Paper Presented to the
58th Annual International Convention
of the Council of Exceptional Children

Philadelphia, Pennsylvania

April 25, 1980

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert N. Freeman
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Dr. Robert N. Freeman
Dept. of Special Education
Bowling Green State University
Bowling Green, Ohio 43403

EC 134309

Life in Classrooms: Teacher Interaction With Successful and Unsuccessful Pupils

ABSTRACT

P.L. 94-142 has mandated the inclusion of appropriate mildly handicapped pupils into regular classrooms. Teacher attitude has been found to be extremely negative toward the concepts involved in "mainstreaming." Using the extremely negative attitudes of teachers as the impetus, selected aspects of teacher interaction with successful and unsuccessful (mainstreamed) pupils were examined. Findings indicated that teachers interact significantly different with the successful and unsuccessful pupil. Successful pupils received almost twice as much interaction in a much more positive vein than did unsuccessful pupils. Implications are drawn and suggestions for change are made.

Life in Classrooms: Teacher Interaction with Successful and Unsuccessful Pupils

Educational theory today proposes that for the majority of mildly handicapped children the regular classroom is the "least restrictive environment." Implicit in this are the dual assumptions that regular and special education teachers are positively disposed to the progressive inclusion of handicapped children into regular classrooms (Jones, 1978), and that the regular classroom is educationally healthier for both the handicapped and non-handicapped learner. Existing research on teacher attitude toward mainstreaming casts serious doubts as to the validity of these assumptions. Gickling and Theobald (1975) found that both regular and special education teachers exhibited negative attitudes toward the concept of mainstreaming. Mandell (1977) asked these groups whether or not the regular education teacher could teach mildly educationally handicapped children in the regular classroom. In situations where a resource room would be available to assist the regular education teacher, 55% of regular educators and 92% of special educators felt that the mildly handicapped child could not be adequately served in the regular classroom. Teacher attitudes have been found (Harvey and others, 1968; Brophy and Good, 1971; Rosenthal and Jacobsen, 1968) to be the most important variable in the success or failure of student efforts in the classroom. Research extending back to the 1950's (Havighurst, 1953) has indicated that students are able to perceive teacher attitudes in the classroom. These perceptions allow students to make decisions as to their potentialities and abilities for the present as well as future academic and behavioral tasks.

While the inclusion of mildly handicapped children into regular classrooms is still in the developmental stage, progress has been made to the point that classroom areas are now available for study. The purpose of this study was to examine selected aspects of teacher-pupil life in the mainstreamed classroom and to determine possible differences for successful and unsuccessful pupils. Specifically, the amount of teacher-pupil interaction, the type of interaction and the distance maintained by the teacher during interaction with pupils judged to be successful and unsuccessful was examined.

METHOD

Subjects.

The population for the study consisted of all third, fourth, fifth and sixth grade pupils enrolled in elementary school classrooms of a medium size urban school system. Each classroom was assigned an identification number. Utilizing a random number chart, eight classrooms were chosen for the study. With the section of the classroom, all pupils in that classroom became eligible for inclusion in the study. To divide the pupils into successful and unsuccessful groups, the following procedure was followed:

1. Total reading and mathematics scores on the Metropolitan Achievement Test were added together and an average composite score attained.

2. In each classroom, all of the composite scores for male pupils were added together and a classroom average composite score derived. The same procedure was followed for female pupils.

3. Any pupil whose average composite score was on or above the classroom average for his/her sex was placed in the successful group pool. Any pupil whose average composite score was six months or more below the classroom average for his/her sex was placed in the unsuccessful group pool. Male and female

pupils whose composite averages were between six months below and the classroom composite average were not included in the study.

Utilizing a random procedure, 32 successful (8 per grade level 3-6) and 32 unsuccessful pupils (8 per grade level 3-6) were chosen. Pupils were chosen on the basis of their standing within their individual classrooms to alleviate inter-classroom variability. Of the 32 pupils in the unsuccessful group, 29 were already "mainstreamed," and 2 others were involved in the assessment process to receive special education services.

Procedures:

The verbal interaction between teachers and the successful and unsuccessful pupils was recorded by an audio tape recorder. As interaction occurred the observer recorded the position number on the tape (for later transcription) and the identification number of the child. Additionally, the observer recorded the distance zone utilized by the teacher during the interaction. Following the collection of the taped material, the verbal interactions were reduced to transcript form for analysis.

Instrumentation:

Transcripts of the interaction were analyzed using Richard Ober's Reciprocal Category System (Ober, Bentley and Miller, 1971). The RCS is an adaptation of the Flanders Interaction Analysis System which allows for the analysis of pupil and teacher talk. It is composed of nine categories of interaction arranged along a continuum from "warms" the classroom atmosphere to "cools" the classroom atmosphere. The variable of distance was examined by means of the four zones of human interaction developed by Hall (1969). These zones allow the measurement

of interactive distance from "touching" (Zone 1) to twelve feet and beyond (Zone 4).

Results:

The data for total amount of interaction between teachers and the successful and unsuccessful groups is presented in Table 1. Using a total of 1,079 recorded interactions, the difference in the amount of interactions was statistically significant ($t = 4.68$) at the 0.01 level. No statistical difference could be found ($t = 0.09$) using sex of the pupil as a variable.

Insert Table 1

The analysis of the Reciprocal Category System data is summarized in Table 2. An inspection of these data reveals that wide variance existed in the teacher's use of the various categories. Especially wide were the differences in the teacher's use of the Warms (category 1, 75% successful, 25% unsuccessful), Accepts (category 2, 69.5% successful, 29.5% unsuccessful), Amplifies (category 3, 62.9% successful, 37.1% unsuccessful), Responds (category 5, 65.1% successful, 34.9% unsuccessful), Corrects (category 8, 29.6% successful, 70.4% unsuccessful), and Cools (category 9, 9.1% successful, 90.0% unsuccessful) areas. Interaction in the student-talk categories tended to mirror the data presented in the teacher-talk categories.

Insert Table 2

Table 3 presents the analysis of the distance zones used by teachers during interaction. A statistically significant difference ($x^2 = 84.35$, $p < 0.001$) was found in the distance maintained by teachers while interacting with the successful and unsuccessful groups.

Insert Table 3

DISCUSSION

These data present a picture of classroom interaction between teachers and successful and unsuccessful groups of pupils. The evidence is overwhelming in support of the different interaction patterns used by teachers during classroom interaction with pupils of varying abilities. The successful pupil who received almost double the interaction (693 events to 386 events) with the teacher experienced classroom life different from the unsuccessful pupil. More important than the numerical difference, however, is the nature of the interaction. An examination of the RCS data reveals that the successful pupil's interaction in all areas is much more positive than the unsuccessful pupil. For successful pupils, the teacher sent warm, accepting, amplifying, responding types of messages while the unsuccessful pupil received directing, correcting and cooling types of messages. The unsuccessful pupils, as they

perceive these patterns of interaction, tend to use this information to make decisions about future attempts to interact with the teacher. This supports and confirms the work of Davidson and Lang (1960) and Jackson (1968) who felt that interaction patterns were built one on the other with each separate interaction event setting the stage for the next event.

Another factor of prime concern is the effect of the teacher's use of interaction on the student's interaction pattern. In the observations and analysis for this study, students mirrored the teacher's interaction patterns. In short, pupils generally talked to teachers in the same way and amounts that the teacher talked to them. Exceptions were that neither the successful nor unsuccessful groups attempted to Warm, Amplify or Cool the classroom atmosphere during interaction. This presented an interaction pattern in which pupils of both groups tended to do what they were told with a minimum of verbal resistance.

One rather alarming pattern emerged from the analysis of the RCS data. The most common type of classroom interaction for all groups was: teacher makes a statement or asks a question, the student responds and the teacher reinforces or most generally goes on to the next teacher-eliciting behavior. The demand for student response was generally satisfied by from one to three words on the part of the pupil. Few attempts were made to pull more information from the pupil or to amplify a comment (Amplifies category used on 54 items) made by a pupil. This was especially true for the unsuccessful group. Out of 1,079 interaction events only 20 were used by the teachers in the Amplifies category for the unsuccessful group.

Teachers used distance zones in different ways while interacting with the groups. While a statistically significant difference was found, this of itself is not overly important. What is critical, however, is the information on the teacher's use of space with all pupils. The largest amount of interaction was conducted from a distance of four and a half feet to twelve feet and beyond. In light of research by Mehrabian (1968), Little (1965) and Freeman (1975), distance is interpreted as a sign of caring and can actually be used to increase student production. Greater distance from the pupils during interaction may be interpreted as a negative sign by the students.

FINAL WORDS

While a number of implications for general sensitivity on the part of the teacher in the classroom to differences in interaction patterns with successful and unsuccessful pupils can be drawn, perhaps a more critical message must be sent to teacher training institutions. Gickling and Theobald (1975), Brophy and Good (1970), Mandell (1976) and Rosenthal and Jacobsen (1968) have given ample proof as to the extreme negative views of teachers toward "mainstreaming" and the possible effects of these views on the unsuccessful pupil. Since teachers' training, along with the student-teachers' own educational history, forms the basis of the individual's teaching style, change needs to occur in the pre-service experiences so that future students (handicapped and non-handicapped) will see different teaching behavior in the classroom.

Behavioral research and common sense would suggest that teachers tend to work more (interact more) with pupils who provide them with

reinforcement. In the public school, this reinforcement is most generally pupil academic success. Pupils who are not successful over periods of time tend to frustrate the teacher and, therefore, may be avoided. To correct this, teacher reinforcement systems need to be revised so that knowledge or skills gained in small amounts over time are as motivating as instant correct responses by students. This will require a different approach to the information given student teachers and the evaluation systems used by administrators in the public schools.

Overall, this study seems to suggest that life in the classroom is significantly different for the pupil experiencing success and by the pupil who is struggling with the educational process. It would seem also that this should be recognized by teachers and the appropriate changes in behavior and interaction be made. Mainstreaming does not seem destined to "go away." This means that larger numbers of "unsuccessful" pupils will be finding their way into the public school classroom. For the education of each child to be "appropriate," classroom interaction must be of the amount and type which will contribute to the growth and development of each child regardless of the classification.

4/P

REFERENCES

Brophy, J. and Good, T. "Teachers' Communications of Differential Expectations for Children's Classroom Performance." Journal of Educational Psychology, 1970, 61(5), 365-374.

Davidson, H. and Lang, G. "Children's Perceptions of Their Teachers' Feelings Toward Them Related to Self-Perception, School Achievement and Behavior." Journal of Experimental Education, 1960, 29(2), 107-118.

Freeman, R. N. "The Relationship of Student and Teacher Distance to Student Productivity." Knoxville: The University of Tennessee, 1975. (Mimeographed.)

Gickling, E. E. and Theobald, J. T. "Mainstreaming: Affect or Effect." Journal of Special Education, 1975, 9, 317-328.

Hall, E. T. The Hidden Dimension. New York: Anchor Books, 1969.

Harvey, O., Prather, M., White, B. and Hoffmeister, J. "Teachers' Beliefs, Classroom Atmosphere and Student Behavior." American Educational Research Journal, 1968, 5, 151-166.

Havighurst, R. J. Human Development and Education. New York: David McKay Company, 1953.

Jackson, P. W. Life in Classrooms. New York: Holt, Rinehart and Winston, 1968.

Jones, R. "Special Education and the Future: Some Questions and Answers to be Questioned." In Reynolds, M. (ed.), Futures of Exceptional Students: Emerging Structures. Minneapolis: National Support Systems Project, 1978, 65-88.

Little, K. B. "Personal Space." Journal of Experimental Social Psychology, 1965, 1, 237-247.

Mandell, C. J. "Factors Related to the Regular Teachers' Attitudes Toward Mainstreaming Mildly Educationally Handicapped Children into the Regular Classroom." Unpublished Doctoral Dissertation, The American University, 1977.

Mehrabian, A. "Influence of Attitude from the Positive Orientation and Distance of a Communicator." Journal of Consulting and Clinical Psychology, 1968, 32(3), 296-308.

Ober, R. L., Bentley, E. L. and Miller, E. Systematic Observation of Teaching: An Interaction Analysis-Instructional Strategy Approach. Englewood Cliffs: Prentice-Hall, 1971.

Rosenthal, R. and Jacobsen, L. Pygmalion in the Classroom. Holt, Rinehart and Winston, 1968.

4/P

TABLE 1

Number of Teacher Interactions with Successful and Unsuccessful Groups

Group	Total Number	Mean	SD	t
Successful	693	21.66	10.63	4.68**
Unsuccessful	386	12.06	5.58	

**p < 0.01.

TABLE 2

Total Incidents of Interaction
By RCS Categories

Categories Teacher-Talk	Total Number of Interaction	Percent of Interaction Successful		Unsuccessful	
Warms 1	16	(12)	75	(4)	25
Accepts 2	338	(235)	69.5	(103)	29.5
Amplifies 3	54	(34)	62.9	(20)	37.1
Elicits 4	661	(352)	53.2	(309)	46.8
Responds 5	109	(71)	65.1	(38)	34.9
Initiates 6	182	(92)	50.5	(90)	49.5
Directs 7	368	(166)	45.1	(202)	54.9
Corrects 8	125	(37)	29.6	(188)	70.4
Cools 9	99	(9)	9.1	(92)	90.9
Student-Talk					
Warms 11	0		0		0
Accepts 12	29	(25)	86.2	(4)	13.8
Amplifies 13	0		0		0
Elicits 14	167	(103)	61.7	(64)	38.3
Responds 15	695	(369)	53.1	(326)	46.9
Initiates 16	198	(131)	66.2	(67)	33.8
Directs 17	5	(4)	80	(1)	20
Corrects 18	4	(3)	75	(1)	25
Cools 19	0		0		0

TABLE 3

Contingency Table for Number of Teacher Interactions by Zone With Successful and Unsuccessful Pupils

Distance Zone	Number of Interactions Successful	Unsuccessful	Chi Square
1. 0 to 18"	62	108	
2. 18" to 4.5'	97	74	
3. 4.5' to 12'	246	114	
4. 12' and beyond	288	90	
Total	693	386	84.35**

**$p < 0.001$.